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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/038,089	01/02/2002	Edward I. Comer	06931.105003	3625

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EXAMINER
MOORE, JAMES K

ART UNIT	PAPER NUMBER
2686	10

DATE MAILED: 05/21/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)
	10/038,089	COMER, EDWARD I.
Office Action Summary	Examiner	Art Unit	
	James K Moore	2686	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) FROM
THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed
  after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any
  earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *05 March 2004*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is
closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-4,6-9 and 11-28* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☒ Claim(s) *23-25* is/are allowed.

6)☒ Claim(s) *1-4,6-9,11-22 and 26-28* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *02 January 2002* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage
application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☒ Notice of References Cited (PTO-892)
2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3)☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
   Paper No(s)/Mail Date _____.
4)☐ Interview Summary (PTO-413)
   Paper No(s)/Mail Date. _____.
5)☐ Notice of Informal Patent Application (PTO-152)
6)☐ Other: _____.

DETAILED ACTION

Response to Arguments

1.   Applicant's arguments with respect to claims 1-4, 6-9, 11-22 and 26-28 have

been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 112

2.   The text of those sections of Title 35, U.S. Code not included in this action can

be found in a prior Office action.

3.   Claim 6 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with

the written description requirement. The claim(s) contains subject matter which was not

described in the specification in such a way as to reasonably convey to one skilled in

the relevant art that the inventor(s), at the time the application was filed, had possession

of the claimed invention.

        Claim 6 claims that the controller "selects one of the WDT transceivers

corresponding to the identified WDTs to communicate the packet based upon a volume

of the data content of the *packet.*" This feature was not described in the specification

originally filed. The specification states that the selection of the transport is based on

the volume of the data content to be communicated, not on the volume of the data

content of any packet. See page 4, line 31 – page 5, line 14.

4.   Claims 8, 9 and 11-21 are rejected under 35 U.S.C. 112, first paragraph, as

failing to comply with the enablement requirement. The claim(s) contains subject matter

which was not described in the specification in such a way as to enable one skilled in

the art to which it pertains, or with which it is most nearly connected, to make and/or use

the invention.

Claim 8 includes the limitation "wherein the controller identifies one of the WDT

transceivers corresponding to one of the identified WDTs on a packet basis." This is

supported in the specification on page 5, lines 14-16, where it is stated that "[t]his

selection of the appropriate WDT for communicating data content can be automatically

made by the communications device on a packet by packet basis." However, the

specification does not elaborate as to what this single sentence means, or how this

feature is performed. It is not apparent why the data content to be communicated would

be packetized before the WDT is selected.

Claim 9 includes the limitation "selecting WDTs on a packet-by-packet basis from

the identified WDTs to support a communication of the data content based upon a

characteristic of the data content." Claim 16 includes the limitation "selecting wireless

data transports from the identified wireless data transport to support communicating the

message based upon an analysis of a volume of the data content on a packet-by-packet

basis." This limitations are similarly not enabled by the specification.

Claim Rejections - 35 USC § 103

5.   Claims 1-3, 7, 22 and 26-28 are rejected under 35 U.S.C. 103(a) as being

unpatentable over Caci (U.S. Patent No. 6,154,658) in view of Sainton (U.S. Patent No.

5,761,621).

Regarding claim 1, Caci discloses a communications system for communicating

packets comprising data content in a cellular mobile radiotelephone system. The

system comprises a plurality of wireless data transport transceivers (CDPD modem 72

and circuit switched cellular radio 34). Each is capable of supporting wireless data

communications in the system. The transceivers provide a plurality of transports

(CDPD and circuit-switched cellular). Each transceiver is coupled to an antenna (38,

74) and communicates one of the packets with one of the transports via the antenna.

See Figure 2; col. 4, lines 38-61; col. 8, lines 7-20; and col. 9, lines 45-63. The system

also comprises a controller (computer 12) that identifies each of the transports

operational within the system for transporting the packet and to select one of the

transceivers corresponding to one of the identified transports for communicating the

packet, and a user interface (microphone 42, speaker 44) coupled to the controller to

provide a unified interface to the transceivers. It is inherent that the system comprises a

normalization function, coupled to each transceiver and to the controller, to transform

the packet into a format acceptable for processing by the selected transceiver. The

communications system communicates different packets using different transports

available within an operating environment. Caci does not disclose that the transceivers

are selected in response to analyzing characteristics of the data content based upon a

plurality of selection criteria on a dynamic, real time basis.

Sainton also discloses a communications system for communicating packets

comprising data content. Sainton's system is also capable of communicating packets

with a plurality of wireless data transports (CDPD and circuit-switched cellular). Sainton

discloses selecting a transport for communication in response to analyzing

characteristics of the data content (data volume) based upon a plurality of weighted

selection criteria (e.g., cost, transmission quality, available bandwidth, security) on a

dynamic, real time basis. This method for selecting a data transport results in the

selection of a transport that meets the individual user's needs. See col. 16, line 28 –

col. 17, line 57. Therefore, it would have been obvious to one of ordinary skill in the art

at the time of the invention to modify Caci with Sainton, such that the transceivers are

selected in response to analyzing characteristics of the data content based upon a

plurality of selection criteria on a dynamic, real time basis, in order to select a transport

that meets the individual user's needs.

Regarding claim 2, Caci in view of Sainton teaches all of the limitations of claim

1, and it is inherent that Caci's system comprises a memory (e.g., a buffer) coupled to

the controller, for storing the data content to be communicated by the selected transport

transceiver, before it is transferred to one of the transceivers.

Regarding claim 3, Caci in view of Sainton teaches all of the limitations of claim

1, and Caci also discloses that the transceivers may be aggregated to form a

transceiver system implemented as a single monolithic component. See col. 12, lines 13-17.

Regarding claim 7, Caci in view of Sainton teaches all of the limitations of claim 1, and Caci also discloses that the controller identifies one of the transports for transporting the packet by identifying each available transport in the operating environment. See col. 9, lines 45-62. Sainton discloses that the transport to communicate the packet may be selected based upon the cost of communicating the packet. See col. 16, lines 61-67.

Regarding claim 22, Caci discloses a memory storage device (computer 12) comprising computer-executable instructions for communicating a message comprising data content in a cellular mobile radiotelephone system. The instructions comprise identifying each wireless data transport in an operating environment of the system in response to monitoring the operating environment, and selecting one identified wireless data transport as a preferred transport medium to support the communication of the message. Caci discloses that a CDPD transport will normally be selected as the preferred transport medium because it is cost-effective. See Figure 2; col. 4, lines 38-61; col. 8, lines 7-20; and col. 9, lines 45-63. Caci does not disclose that the transport is selected based upon an analysis of the volume of the data content, or that each transport is assigned to support the communication of message comprising a different predetermined range of data content volume, or that the transport may be selected based upon a weighted combination of alternative selection criteria.

However, Sainton teaches that circuit-switched transports may be more cost-effective than conventional CDPD packet-switched transports for larger messages. Sainton also teaches selecting transports based upon an analysis of the volume of data content, and assigning transports to support the communication of messages comprising different predetermined ranges of data content volume, in order to utilize the most cost-effective transport. See col. 16, line 28 – col. 17, line 57. Sainton also teaches that an identified wireless data transport may be selected to support the communication of the message based upon a weighted combination of alternative selection criteria other than data content volume, the alternative selection criteria comprising cost of the message communication and expected latency. See col. 16, lines 28-54. It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Caci with Sainton, such that the transport is selected based upon an analysis of the volume of the data content, each transport is assigned to support the communication of message comprising a different predetermined range of data content volume, and the transport may be selected based upon a weighted combination of alternative selection criteria, in order to select the most cost-effective transport as the preferred transport and to select a transport that meets the individual user's needs.

Regarding claim 26, Caci discloses a system for communicating a message comprising data content in a cellular mobile radiotelephone system. The system comprises a plurality of wireless data transport transceivers (CDPD modem 72 and circuit switched cellular radio 34) capable of supporting wireless data communications

with the system by a plurality of transports (CDPD and circuit-switched cellular). Each

transceiver is coupled to an antenna (38, 74) and communicates the message with a

transport via the antenna. See Figure 2; col. 4, lines 38-61; col. 8, lines 7-20; and col.

9, lines 45-63. The system also comprises a controller (computer 12) that identifies

each of the transports operational within the system for transporting the message and to

select one of the transceivers corresponding to one of the identified transports for

communicating the message, and a user interface (microphone 42, speaker 44) coupled

to the controller to provide a unified interface to the transceivers. It is inherent that the

system comprises a normalization function, coupled to each transceiver and to the

controller, to transform the message into a format acceptable for processing by the

selected transceiver. It is also inherent that the computer 12 comprises a memory for

storing firmware comprises instructions for execution by the controller to enable

communication by the transceiver, and for storing data comprising the identity of each

transport supported by an operating environment. Caci does not disclose that the

transceivers are selected in response to analyzing characteristics of the data content of

the message based upon a weighted combination of selection criteria.

Sainton also discloses a communications system for communicating packets

comprising data content. Sainton's system is also capable of communicating packets

with a plurality of wireless data transports (CDPD and circuit-switched cellular). Sainton

discloses selecting a transport for communication in response to analyzing

characteristics of the data content (data volume) based upon a weighted combination of

selection criteria (e.g., cost, transmission quality, available bandwidth, security). This

method for selecting a data transport results in the selection of a transport that meets the individual user's needs. See col. 16, line 28 – col. 17, line 57. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify Caci with Sainton, such that the transceivers are selected in response to analyzing characteristics of the data content based upon a weighted combination of selection criteria, in order to select a transport that meets the individual user's needs.

Regarding claim 27, Caci in view of sainton teaches all of the limitations of claim 26, and it is inherent that the memory in Caci's computer 12 stores data input by a user via the user interface (microphone 42) for transmission by the selected transceiver, since speech data is encoded in encoder 50, and passes through computer 12 before being transferred to one of the transceivers. See Figure 2 and col. 10, lines 27-42.

Regarding claim 28, Caci in view of Sainton teaches all of the limitations of claim 26, and it is inherent that the memory stores an instruction set executable by the controller and normalization data (the data to be normalized and transmitted) for use by the normalization function.

Allowable Subject Matter

6.   Claims 23-25 are allowed.

Conclusion

7.   Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP

§ 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

8.   Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ken Moore, whose telephone number is (703) 308-6042. The examiner can normally be reached on Monday-Friday from 8:30 AM - 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Marsha Banks-Harold, can be reached at (703) 305-4379.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks

Washington, D.C. 20231

or faxed to:

(703) 872-9314 (for Technology Center 2600 only)

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal

Drive, Arlington, VA, Sixth Floor (Receptionist).

Any inquiry of a general nature or relating to the status of this application or

proceeding should be directed to the Technology Center 2600 Customer Service Office

whose telephone number is (703) 306-0377.

Ken Moore

5/13/04

CHARLES APPIAH
PRIMARY EXAMINER